

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A metering valve for dispensing fluid, the metering valve comprising a valve body (10), a metering chamber (20), and a valve member (30) that is slidable in said valve body (10) so as to dispense the fluid contained in the metering chamber (20), ~~the metering valve being characterized in that the wall (27) of said metering chamber (20) is curved, at least in part, in axial section, and in that said metering chamber (20) includes comprising a top orifice (25), and a bottom orifice (26), said valve member (30) passing through said top and bottom orifices (25, 26), a circularly-cylindrical wall (27) defining said metering chamber (20) by interconnecting said top and bottom orifices (25, 26), said circularly-cylindrical wall (27) being metering chamber comprising two curved portions that are curved or rounded radially inwardly, at least in part, in an axial section so that it does said curved portions do not form any angles; one of the curved portions located axially between the top orifice and the circularly-cylindrical wall and the other curved portion located axially between the bottom orifice and the circularly-cylindrical wall.~~

2. (original): A metering valve according to claim 1, in which said circularly-cylindrical wall (27) comprises a middle wall portion (22), a top wall portion (21) that connects the middle wall portion (22) to said top orifice (25), and a bottom wall portion (23) that connects the middle wall portion (22) to said bottom orifice (26).

3. (original): A metering valve according to claim 2, in which said middle wall portion (22) is cylindrical.
4. (currently amended): A metering valve according to claim 2, in which said top wall portion (21) is rounded, in particular spherical.
5. (currently amended): A metering valve according to claim 2, in which said bottom wall portion (23) is rounded, in particular spherical.
6. (previously presented): A metering valve according to claim 1, in which said metering chamber (20) is formed by two wall elements (28, 29) that are fastened to each other in leaktight manner.
7. (currently amended): A metering valve according to claim 6, in which the top and bottom orifices (25, 26) include respective sealing gaskets (45, 46), said wall elements (28, 29) substantially covering said gaskets (45, 46), respectively so as to limit the contact area between said gaskets (45, 46) and the fluid contained in said metering chamber (20), and/or so as to limit the degree to which the gaskets move during actuation.
8. (previously presented): A fluid dispenser device, characterized in that it includes a metering valve according to claim 1.

9. (new): A metering valve according to claim 2, in which said top wall portion is spherical.

10. (new): A metering valve according to claim 2, in which said bottom wall portion is spherical.

11. (new): A metering valve according to claim 7, in which said wall elements substantially covering said gaskets, respectively so as to limit the degree to which the gaskets move during actuation.

12. (new): A metering valve according to claim 6, in which the top and bottom orifices include respective sealing gaskets, said wall elements substantially covering said gaskets, respectively so as to limit the degree to which the gaskets move during actuation.

13. (new): A metering valve for dispensing fluid, comprising:
a valve body;
a metering chamber comprising a top orifice and a bottom orifice;
a valve member in the valve body and slidable through the top orifice and the bottom orifice so as to dispense the fluid from the metering chamber;
an inside of the metering chamber bounded at least in part by a cylindrical wall portion, a top curved portion and a bottom curved portion, the cylindrical wall portion axially disposed between the top curved portion and the bottom curved portion;

the top curved portion curved radially inwardly in an axial section so as to be concave with respect to the inside of the metering chamber; and

the bottom curved portion curved radially inwardly in an axial section so as to be concave with respect to the inside of the metering chamber.

14. (new): The metering valve according to claim 13, wherein the top curved portion does not form an angle and the bottom curved portion does not form a sharp angle or corner.

15. (new): The metering valve according to claim 13, wherein the top curved portion extends to the top orifice and the bottom curved portion extends to the bottom orifice.

16. (new): The metering valve according to claim 13, wherein the cylindrical wall comprises a middle wall portion, a top wall portion that connects the middle wall portion to the top orifice, and a bottom wall portion that connects the middle wall portion to the bottom orifice (26).

17. (new): The metering valve according to claim 16, wherein the middle wall portion is cylindrical.

18. (new): The metering valve according to claim 16, wherein the top wall portion comprised the top curved portion and the bottom wall portion comprised the bottom curved portion.

19. (new): The metering valve according to claim 13, wherein the metering chamber is formed by two wall elements fastened to each other in leaktight manner.

20. (new): The metering valve according to claim 19, wherein the top orifice and the bottom orifice have respective sealing gaskets, the wall elements substantially covering the gaskets, respectively so as to limit contact area between the gaskets and fluid contained in the metering chamber.